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# Introduction

## 1.1 Overview

This satellite receiver is designed for the reception of free-to-air and encrypted channels. Depending on your location, enjoy the rich choice of up to 10,000 different channels broadcasting a large range of programs: culture, sports, cinema, news, events, etc. This receiver is assembled with highly qualified electronic parts.

## 1.2 Main Features

- High-Definition Personal Video Recorder (HD PVR)
- 2x DVB-S/DVB-S2 Satellite Tuners (MPEG-2, MPEG-4 & H.264)
- 1x DVB-T Terrestrial Tuner
- Output resolution 576p & 576i, 720p, 1080i
- HDMI & Component Output (YPbPr) with Upscaler to Improve Picture Quality
- 2 Smart Card Reader & 2 Common Interfaces (2CI)
- MP3 player and JPEG viewer via internal HDD or USB flash Drive (memory stick)
- Multisatellite search.
- On-screen display with true color full resolution.
- DiSEqC control version 1.0, 1.1, 1.2 and USALS compatible.
- Enhanced 16 favorite channel groups.
- Powerful channel control by favorites, lock, skip, move and delete function.
- Channel sort by alphabet, transponder and CAS.
- Multilingual OSD Menu : English, Spanish, Portuguese, French, German, Italian, Turkish, Arabic, Persian, Russian, Greek, Czech, Romanian.
- Extended EPG and program reservation on EPG.
- Teletext & Subtitle by OSD and VBI
- Last channel memory function.
- Total 10,000 channels programmable.
- Factory default channel list
- Fully Featured VFD text Front Panel Display
- Sensitive Tuner
- Support 4:2:0



## 1.2 Main Features



- Less than 1 second channel change
- Dolby Digital Optical S/PDIF
- 2 Scarts, (CVBS, RGB / Loop-through RGB) & S-Video
- Various games
- Software & channel list upgrade via RS-232C : PC to STB, STB to PC, STB-STB and USB
- Parental lock / Installation lock / receiver lock.
- Zoom function on pause/live channel
- Multipicture display.
- Support for multiple language broadcasts
- SCPC & MCPC receivable from C/Ku band satellites LNBs supported : Universal, Single, Single S & C band wideband LNBs
- 100-250V AC 50/60Hz
- LNB Short Circuit protection onboard
- Software & Channel List download via USB 2.0
- Supports up to 1TB S-ATA 3.5" & 2.5" Hard Disk Drives (HDD)
- 2x USB 2.0 Ports: PVR function using external HDD, playback MP3, JPEG Photos & Software transfer
- Blind Search
- Lan 10/100Mbps Ethernet
- DOLBY DIGITAL PLUS Manufactured under license from Dolby Laboratories. "Dolby" and the double-D Symbol are trademarks of Dolby Laboratories.

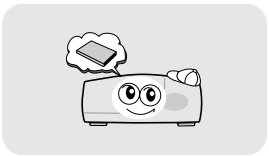
**DiSEqC is a trademark of EUTELSAT**

The digital receiver can supply a current 400 milliampere at maximum for antenna devices including LNB, DiSEqc switch and antenna rotor through each antenna input connection separately but not simultaneously.If there are too many antenna devices to be supplied with power through antenna input connections simultaneously for a long time, your LNBs may lack power to operate. So it is recommended to link the LOOP OUT 1 connector to the LNB INPUT 2 connector with a loop cable even though the digital receiver is designed to operate over two antennas alternatively.

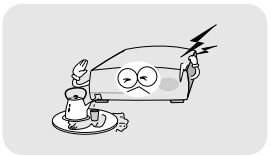
# Safety/Precautions

## 2.1 Safety

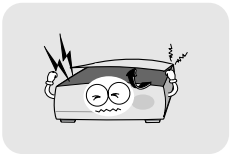
Be sure to read this user's manual before starting the operation of the unit.



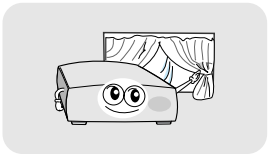
Do not touch the power cord with wet hands as it may cause electric shock.



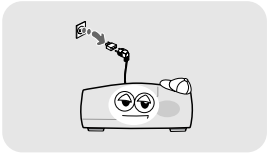
Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.



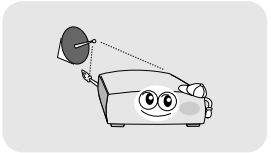
Place the unit in a well ventilated and no-heat environment.



When you do not use this unit for a long time, make sure that power cord is pulled out from the outlet. Also do not use a damaged power cord as it may cause fire or electric shock.



A professional installation is required. If reception is interrupted, contact your local service centre.



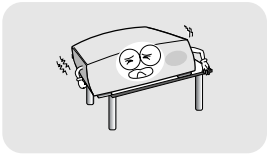


## 2.2 Precautions

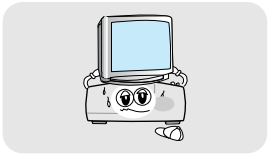


### When installing the unit

Install the unit horizontally. An uneven installation may cause the unit to be damaged.

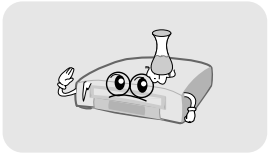


Do not put heavy items such as a TV set on the unit. That may damage the unit.



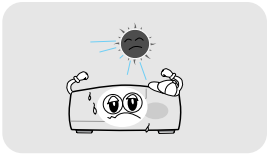
Do not leave the unit where the water drops or splashes.

Do not put water holding items such as vases on the unit.

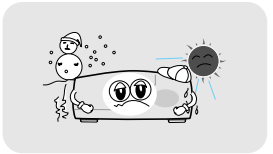


Do not install the unit:

- **Where it is subject to vibrations**
- **Where it is exposed to direct sunlight**
- **Where there is humidity**
- **Where the temperature is too high or too low.**
- **Where there is no ventilation**



Moving the unit to a hot area from a cold one will cause condensation. Do not operate the unit for one or two hours or until it has dried completely.



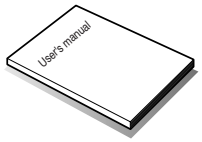
▶ The mains plug is used as the disconnect device.
The disconnect device shall remain readily operable.

# Points to Check before Use

## 3.1 Accessories

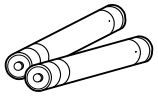
**The accessories below are included with this receiver:**

User's manual : 1




Remote control : 1

Batteries (AAA type) : 2



HDMI cable : 1

▶ If any of the above-listed accessories is missing, contact your sales representative.

## 3.2 The Satellite dish

Your dish should be properly installed and azimuth and elevation must be precisely set up.

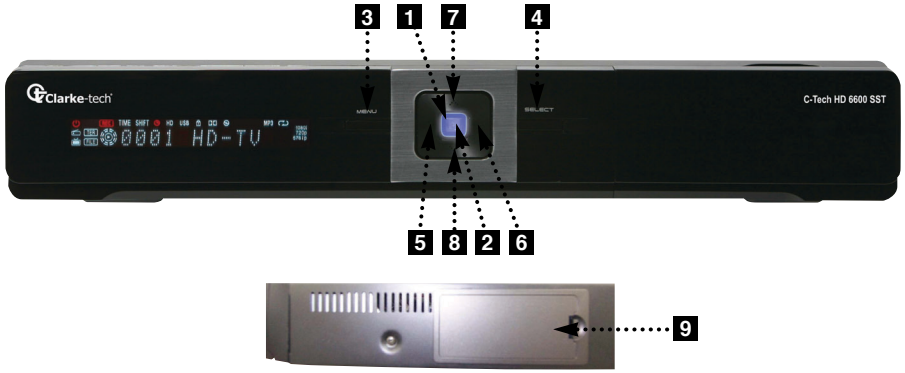
▶ This unit supports DiSEqC 1.2 and can work with a compatible antenna positioner. Ask your dealer for information.



# Controls/Functions



## 4.1 Front Panel




**1** **Standby/Power on Indications Lamp** : Flashes red light in "Standby" mode and shows no light in "Power ON" mode.

**2** **Power** : Switches the receiver between "Standby" and "Power ON" modes.

**3** **Menu** : To enter or exit the main menu.

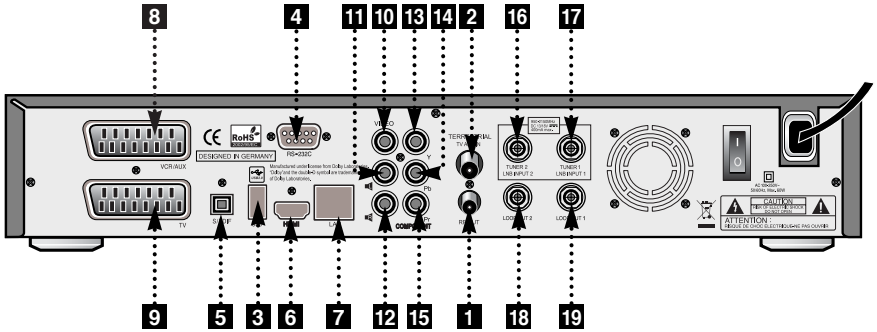
**4** **Select** : To show the Channel List in non-menu mode and select on item or confirm in menu mode.

**5** - **6** **VOL** (◀/▶) : To change the volume level in non-menu mode and modify a setting in menu mode.

**7** - **8** **CH** (▼/▲) : To switch channels or change the cursor position on the application screen.

**9** 2.5" & 3.5" S-ATA HDD(Max. 1TB)

## 4.2 Rear Panel




| No. | Name | Connector | Function |
|---|---|---|---|
| 1 | RF OUT | UHF 21-69 IEC 169-2 MALE | Output to TV |
| 2 | TV ANT IN | IEC 169-2 FEMALE | Input from analog terrestrial antenna |
| 3 | USB | USB A-type | USB 2.0 |
| 4 | RS-232C | DB-9 | Low speed serial port |
| 5 | S/PDIF | Fiber Optic | Digital audio output (Optical) |
| 6 | HDMI | HDMI | Digital Video/Audio Output |
| 7 | LAN | RJ-45 | 10/100Mbps Ethernet |
| 8 | VCR/AUX SCART | SCART | CVBS Video Output<br>CVBS, RGB Video Input<br>Audio Output |
| 9 | TV SCART | SCART | CVBS, RGB Video Output, Audio Output |
| 10 | VIDEO | RCA cinch | Composite video output |
| 11 | AUDIO L | RCA cinch | Left audio output |
| 12 | AUDIO R | RCA cinch | Right audio output |
| 13 | Y | RCA cinch | Component video output(Y) |
| 14 | Pb | RCA cinch | Component video output(Pb) |
| 15 | Pr | RCA cinch | Component video output(Pr) |
| 16 | LNB INPUT2 | IEC 169-24 FEMALE | IF input from LNB to digital tuner2 |
| 17 | LNB INPUT1 | IEC 169-24 FEMALE | IF input from LNB to digital tuner1 |
| 18 | LNB OUTPUT2 | IEC 169-24 FEMALE | IF loop-through output from digital tuner2 |
| 19 | LNB OUTPUT1 | IEC 169-24 FEMALE | IF loop-through output from digital tuner1 |
| 20 | DVB-T IN | IEC-169-2 FEMALE | Cable signal input to digital tuner. |
| 21 | LOOP OUT IEC | 169-2 MALE | Loop-through output from digital tuner. |



## 4.3 Remote controller

**1** **POWER :** To turn the receiver On/Off.

**2** **TV/RADIO :** To switch between TV and Radio.

**3** **MUTE :** To turn the sound On/Off.

**4** **TEXT :** To show the teletext contents if teletext is transmitted. Used for special functions in menu mode.

**5** **SUBTITLE :** To show the subtitle contents if subtitle is transmitted.

**6** **AUDIO :** To show the Multi-language audio track, the stereo-mono mode and subtitle information. Used for special functions in menu mode.

**7** **MOSAIC :** To display multiple pictures.

**8** **SLEEP :** To set the STB off after minutes.

**9** **FREEZE :** To pause the video. Press again to resume the video.

**10** **ZOOM :** To zoom In/Out.

**11** **GUIDE :** To show the TV/Radio program guide.

**12** **INFO :** To show information about the current program. Press twice to show detail.

**13** **RECALL :** To move to the previous channel. Used for special functions in menu mode.

**14** **GROUP :** To change the channel groups(Satellites or favorite groups).

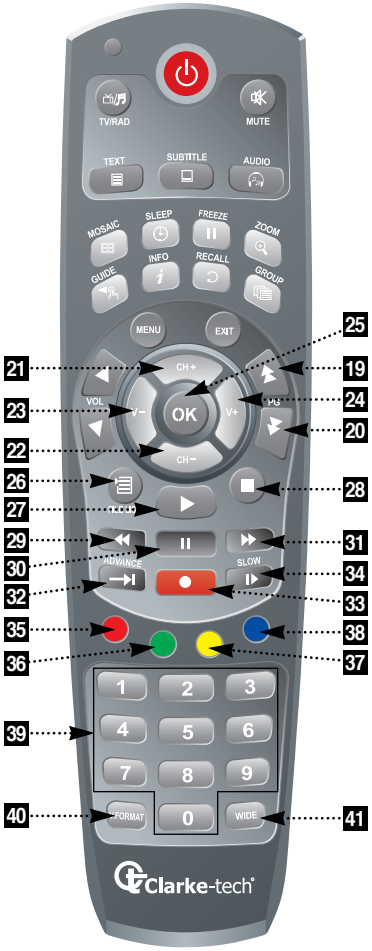
**15** **MENU :** To enter or exit the main menu.

**16** **EXIT :** To exit from the present menu and move to the previous menu.

**17** - **18** **Vol Up & Down :** To change the volume level in non-menu mode.

English

## 4.3 Remote controller




**19** - **20** **Double arrow Up/Down :** To move to the next or previous page when many pages are available.

**21** - **22** **Up & Down :** To switch channels in non-menu mode and move the cursor up/down in menu mode.

**23** - **24** **Left & Right :** To change the volume level in non-menu mode and modify a setting in menu mode.

**25** **OK :** To show the Channel List in non-menu mode and select an item or confirm in menu mode.

**26** **FILELIST :** To display the filelist.

**27** **PLAY :** Play Content.

**28** **STOP :** Stop Playback.

**29** **RWD :** Playback in rewind mode.

**30** **PAUSE :** Pause playback.

**31** **FWD :** Playback in forward mode.

**32** **ADVANCE :** Go to live channel.

**33** **REC :** Start recording.

**34** **SLOW :** Playback in slow mode.

**35** - **38** **Color Key :** Select the option such as View List, Select Disk, Rename.

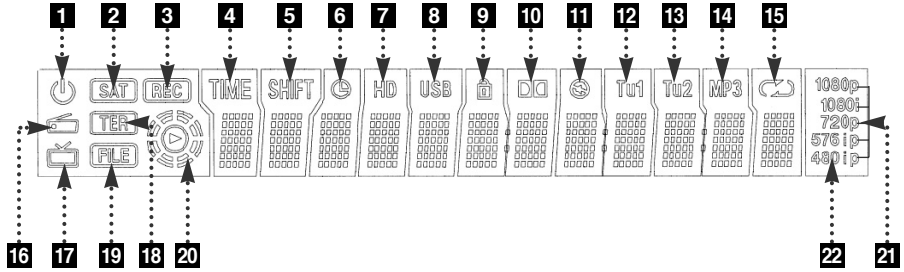
**39** **Numeric Keys (0-9) :** To enter numerical settings (such as channel numbers) directly.

**40** **V.FORMAT :** To switch the resolution of video output.

**41** **Wide :** To select a TV aspect ratio with Pan Scan or Letter-Box(4:3) (Full screen or Pillar box(16:9).



## 4.4 Front Display




| | | |
|---|---|---|
| 1 | | Indicates Power (On/Off) mode |
| 2 | SAT | Lights when the signal comes in via satellite dish |
| 3 | REC | Lights when the current channel is recording |
| 4 | TIME | Lights when Time-Shift Mode is set to enable |
| 5 | SHIFT | Lights when Time-Shift Mode is set to enable |
| 6 | | Lights when a timer setting in standby mode |
| 7 | HD | Lights when the signal is HD |
| 8 | USB | Lights when USB devices is connected |
| 9 | | Indicates the current channel is set to Lock mode |
| 10 | DD | Lights when the current chanel is Dolby audio format |
| 11 | | Lights when the current sound is set to Off |
| 12 | Tu1 | Feature not supported |
| 13 | Tu2 | Feature not supported |
| 14 | MP3 | Ligths when Mp3 player is enabled |
| 15 | | Lights when loop mode is setting in Mp3 player |
| 16 | | Lights when the current channel is Radio mode |
| 17 | | Lights when the current channel is TV mode |
| 18 | TER | Lights when the signal comes in via TV Antenna |
| 19 | FILE | Indicates when the current playback mode in file list |
| 20 | | Lights when Media & Recorded file is playing and revolving on the outer circle |
| 21 | 1080i | Indicates the resolution of video ouput |
| 22 | (576)i p | Indicates the Progressive or interlaced scanning mode |

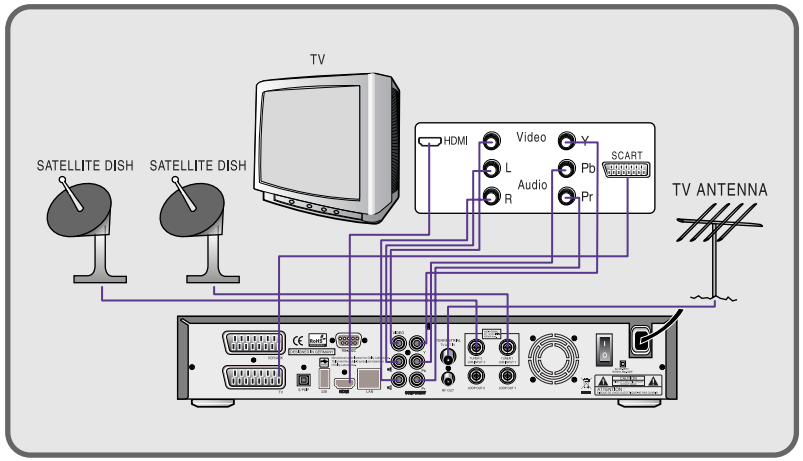
# How to Connect

## When Connecting the Receiver to a TV with RF connectors

**1** **Connect the TV antenna to TV ANT IN**

**2** **Connect the Video and Audio of the TV to Video and Audio: connect the red and white connectors to Audio R and Audio L, and the yellow connector to Video**

**3** **Connect your satellite dish**



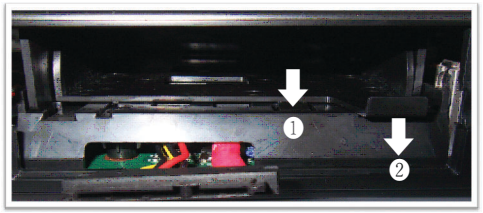



## 3.5”, 2.5” SATA HDD Assembly Instruction

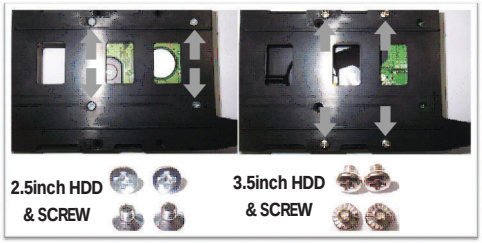


1. Turn off AC power.
2. Open the HDD SLOT cover.

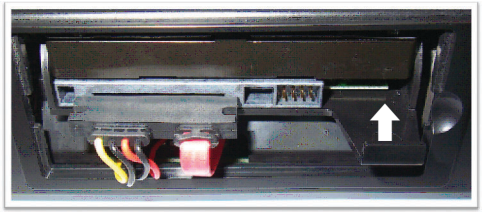
3. Remove HDD Bracket .
   → Push no.1 and pull no 2.

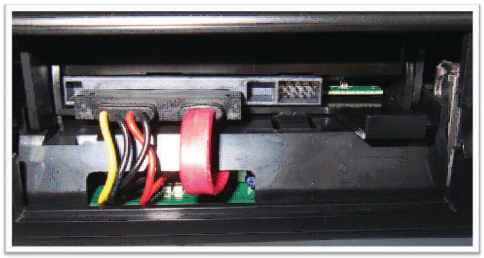



4. Screw & assemble HDD and HDD Bracket.




5. Assemble HDD Bracket at the HDD SLOT.





*Note : For PVR Mode, Please go to Page 50

# Operation

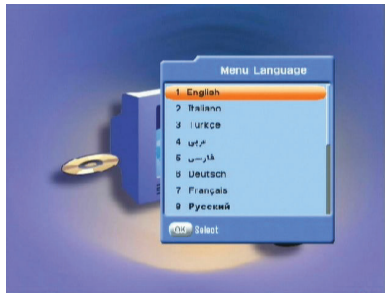
## 6.1 Getting Started

After your receiver is powered on, proceed with installation as follows :

### *1) Menu Language Setting*

❶ Turn on your TV and receiver.

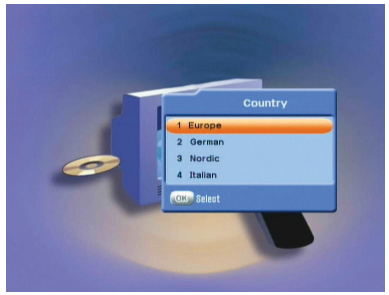
❷ The pop-up menu for language selection will appear.<Figure 6.1.1>
Select one language and press OK to proceed.




<Figure 6.1.1>

### *2) Country Setting*

❶ Select a country and press the OK button on.




<Figure 6.1.2>



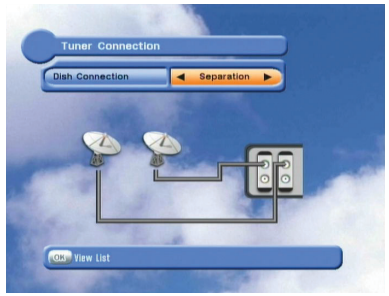
## 6.1 Getting Started

### *3) Tuner Connection*

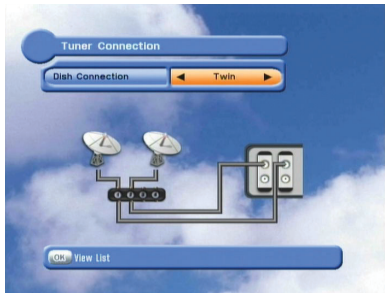
❶ Press the **MENU** button on the remote to display the main menu.

❷ Select **Tuner Connection**, the **Tuner Connection** menu will appear.

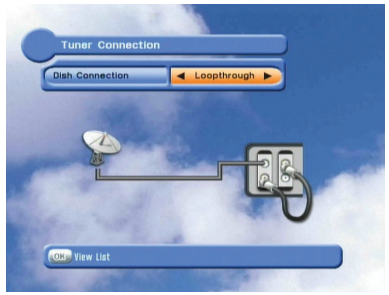
❸ Select Dish Connection allow to your satellite antenna configuration.
**(Twin/Separation/Loopthrough)**




<Figure 6.1.3>




<Figure 6.1.4>




<Figure 6.1.5>

### *4) Antenna Setup*

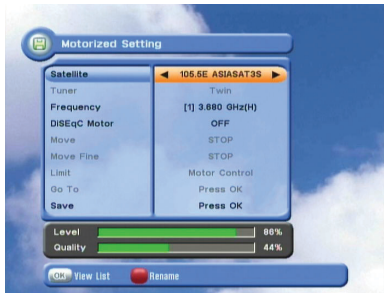
❶ Press the **MENU** button to display the main menu.

❷ Use / and / to move in the menu.

❸ Press on 'Dish Setting'. The following window will appear. <Figure 6.1.6>
If you have a motorized dish, press on 'Motorized Setting'. < Figure 6.1.7>

***∗ Note : Enter a 4-Digit password if need arise. The default password is '0000'.***

<Figure 6.1.6>




<Figure 6.1.7>

❹ Select the item that you want to edit, and set its parameters as desired. <Dish Setting>

- **Satellite** : Select any satellite by pressing / buttons on the remote.
- **Tuner :** Select Tuner1 / Tuner2 / Both(Tuner1) / Both(Tuner2).
- **Frequency :** Select the Frequency
- **LNB Power :** Select among ON/OFF/13V/18V.
- **LNB Type :** Select among Single/Universal/OCS.
- **LNB Freq :** Set the frequency of the LNB oscillator.
- **22KHz :** When not AUTO, set the signal path from LNB or switch by selecting a control signal among 0/22KHz.
- **DiSEqC 1.0 :** Select DiSEqC 1.0 Port.
- **DiSEqC 1.1 :** Select DiSEqC 1.1 Port.

❺ Select the item that you want to edit and set its parameters as desired. <Motorized Setting>

- **Satellite :** Select any satellite by pressing / buttons on the remote.
- **Tuner :** Select Both(Tuner1) / Both(Tuner2).
- **Frequency :** If the default TP frequency is not appropriate, you can select another TP frequency at which to check for signal.
- **DiSEqC Motor :** Select DiSEqC protocol among OFF/1.2/USALS as appropriate for your Motor.







***(When the DiSEqC Motor parameter is set as 1.2)***

- **Move :** You can move the dish to the West/East.
- **Move Fine :** Move the dish position 1 step at a time to west/east by pressing / buttons.
- **Limit :** If you want to set limits, press .
  - **Disable Limit :** You can disable the East and West limits.
  - **Goto Center :** Move the dish to the initial 0 position.
  - **Set East / West Limit :** Move the dish East or West using / . Press to set East or West limit
- **Go To :** Go to the position of the saved satellite.
- **Save / Recalculate**
  - **Save :** Save the current setting of DiSEqC 1.2 system.
  - **Recalculate :** Recalculate the position of all other saved satellites relative to the known position.

***(When the DiSEqC Motor parameter is set as USALS)***

- **Move :** Move the dish position to West/East by pressing / buttons.
- **Limit :** If you want to set limits, press .
  - **Disable Limit :** You can disable the East and West limits.
  - **Goto Center :** Move the dish to the initial 0 position.
  - **Set East / West Limit :** Move the dish East or West using / . Press to set East or West limit
- **Sat Degree :** Displays the current degree of the selected satellite. Edit degree by pressing / buttons and numeric buttons.
- **Antenna Position :** Press .
  - **Goto Reference :** Move the dish to the reference 0 position.
  - **Antenna Longitude :** Edit antenna longitude by pressing / buttons and numeric buttons.
  - **Antenna Latitude :** Edit antenna latitude by pressing / buttons and numeric buttons.
- **Go To :** Save the current setting of USALS System.

***∗ Note : You need to know what LNB you are using to correctly set the L.O. (local oscillator) frequency.***

***∗ Note : You need to understand how your receiver is connected to properly set the 22KHz and DiSEqC.***

❻ When you are done, press the **EXIT** button.

### *5) Satellite Scan*

Through this function, the receiver searches for all the available channels and saves them in memory.

▶ **Auto Scan <Figure 6.1.8>**

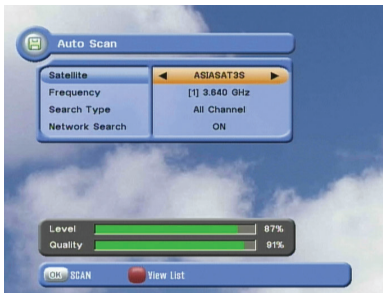
❶ To select more than one satellite, press the RED button when the selection bar is positioned on the satellite.

❷ Press OK on the names of the satellites that you want to scan under 'Satellite List'. Press the EXIT button to close the 'Satellite List'.

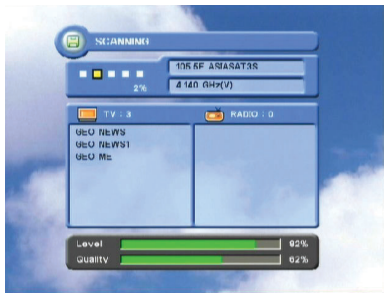
❸ Press ◀ / ▶ and set the 'Search Type' and 'Network Search' parameters.

- **Search Type :** Decide for which channels to search (All channels/ Free channels only/ TV channels only).
- **Network Search :** Set ON to find more transponders (frequencies) through a Network Information Table (NIT) scan. That is, when the broadcaster is sending a NIT through a given transponder, the receiver will also scan for transponders listed in the NIT and not otherwise recognized. (this can happen when a transponder is new)

❹ Press OK under 'SCAN' to scan the selected satellites. <Figure 6.1.9>




<Figure 6.1.8>




<Figure 6.1.9>







▶ **Blind Scan <Figure 6.1.10>**

❶ Select the satellites you want to search by pressing the button on the remote.

❷ Press ◀ / ▶ to set the "Frequency" and "Polarization" and "Scan Mode" options.

- **Frequency :** Select TP frequency
- **Polarization :** Select Vertical / Horizontal / All.
- **Scan Mode :** All / Free / TV
  - **All :** To search all the Free To Air and scrambled channels, TV & Radio channels.
  - **Free :** To search Free To Air channels only.
  - **TV :** To search TV channels only.

❸ **SCAN** : Begin channel search of the selected satellites.

▶ **Manual Scan <Figure 6.1.11>**

❶ Select a transponder.

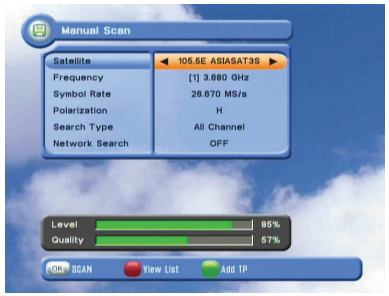
❷ To change a transponder's information (Frequency, Symbol Rate), use the **NUMERIC** buttons.

❸ To add a new transponder, press the **GREEN** button.

❹ To delete a transponder, press the **YELLOW** button with the cursor next to the Frequency parameter.

❺ To search a transponder, set its different parameters and press OK.

<Figure 6.1.10>




<Figure 6.1.11>

▶ **Package Identifier (PID) Scan <Figure 6.1.12>**

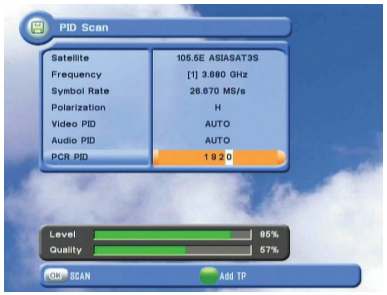
❶ Select a transponder.

❷ To change a transponder's information (Frequency, Symbol Rate), use the **NUMERIC** buttons.

❸ To add a new transponder, press the **GREEN** button.

❹ To delete a transponder, press the **YELLOW** button with the cursor next to the Frequency parameter.

❺ To search a transponder, set its different parameters and press / . You can search a specific channel of the transponder by setting its PID data (Video, Audio and PCR).




<Figure 6.1.12>

*∗ Note : If you cannot access programs after correctly completing a scan procedure, please contact your seller or your installer.*





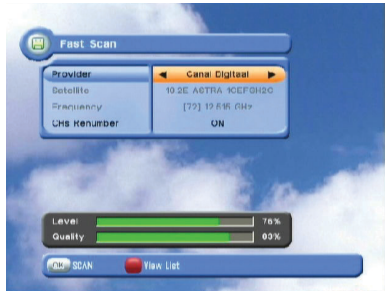


▶ **Fast Scan <Figure 6.1.13>**

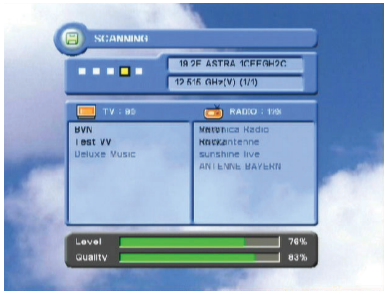
❶ For Provider choose either Canal Digitaal or TV Vlaanderen.

❷ For CHs Renumber select ON/OFF

❸ Press the **Red** button.




<Figure 6.1.13>




<Figure 6.1.14>

## *6) Terrestrial Scan*

Through this function, the receiver searches for all the available channels and saves them in memory.

▶ **Auto Scan <Figure 6.1.15>**

❶ Press the **YELLOW** button when the selection bar is positioned on any item and "Scanning menu" will appear on the screen. <Figure 6.1.16>

<Figure 6.1.15>

<Figure 6.1.16>

▶ **Manual Scan <Figure 6.1.17>**

❶ Select the channel number or frequency you want to search for select the channel number by pressing **CH ▼**or **CH ▲** on the remote control, or specify a frequency by entering the frequency with the number keys. <Figure 6.1.18>

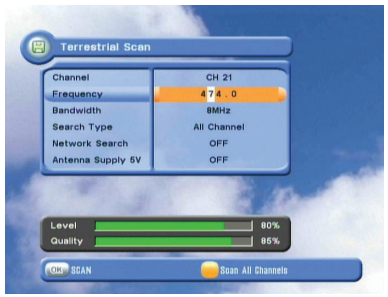
❷ For the **Bandwidth** choose either 7 MHz or 8 MHz.

❸ For the **Search Type**, select **All Channel, FTA Only** or **TV Only**.

❹ For **Network Search**, select **ON** to find the most channels available.
The strength and quality of the signal from the selected channel is shown by the **Level** and **Quality** indicators near the bottom of the screen.

❺ **Antenna Supply 5V :** Select antenna booster power **ON / OFF**.

❻ Press OK to begin the scan.




<Figure 6.1.17>

<Figure 6.1.18>





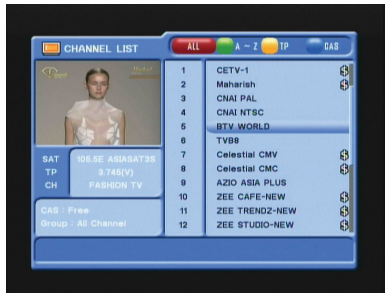


### *7) Channel Selection*

You can use ▲ / ▼ to navigate between channels until you find the channel you want.

▶ If you know the channel number, you can enter it with the **NUMERIC** buttons and wait 2 seconds until the channel is changed.

▶ If you know the channel name or transponder or CAS, you can press OK to display the channel list <Figure 6.1.19>




<Figure 6.1.19>

❶ In the left side of screen, detailed information about the selected channel will be displayed. (Satellite Name, Frequency(Polar) and Channel Name)

❷ You can use the following buttons to navigate between channels:

- ▲ / ▼ **:** Moves one channel up/ down.
- ◀ / ▶ **:** Moves one page up / one page down.
- **RED :** Shows all channels in the current group.
- **GREEN :** Shows all channels sorted alphabetically.
- **YELLOW :** Shows all channels sorted by Transponder.
- **BLUE :** Shows all channels sorted by CAS system.

❸ Press OK when the selection bar is positioned on the desired channel.

### *8) Other Functions of the Remote Control*

**▶ Volume Control**

❶ While watching a program, press ◀ or ▶ to control the volume.

❷ You can press the **MUTE** button to remove the sound of the program: the mute icon will be displayed. Press the **MUTE** button again to turn the sound back on.

**▶ Channel Information**

❶ You can press the **INFO** button to display the information banner for a few seconds.

❷ If you then press the **INFO** button again, a detailed banner will be displayed.

**▶ TV/ RADIO switching**

You can press this key to change from a TV channel to a Radio channel or vice versa.

**▶ RECALL**

Press to return to the previous channel.

**▶ Audio**

Press to adjust the subtitle and/or audio status of the current channel:

**- Audio Mode :** Select between, Stereo → Mono-Left → Mono-Right

**- Audio Track :** Select between tracks available in this program

**- Audio Level :** Select between, High → Medium → Low

***∗ Note : These subtitle and audio parameters are workable only when the desired channel supports these functions.***

**▶ TEXT**

The Teletext service is a text data service sometimes available from the Service Provider.

**▶ FREEZE**

You can press this key to freeze the video. Press it again to resume the video.

**▶ GROUP**

When watching TV or listening to Radio, you can press this button to view the list of satellites and/or favorite channel groups.
Only registered satellites and favorite groups are displayed.



6.1 Getting Started



**▶ Multi Picture Display <Figure 6.1.20>**

You can press to display multiple pictures; you can choose the number of pictures such as 1X2, 2X2, 2X3 or 3X3.

<Figure 6.1.20>

**▶ ZOOM**

You can press to zoom in the video. <Figure 6.1.21>

❶ Press the PAUSE button and press . You can zoom in sections of Freezed Video <Figure 6.1.22>

❷ While watching a program, press . You can zoom in sections of playing video.

❸ To cancel the freeze status, please release the zoom status.

<Figure 6.1.21>

<Figure 6.1.22>

## 6.1 Getting Started

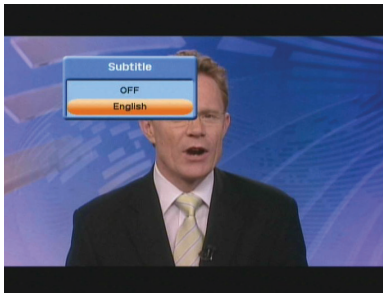
▶ **SUBTITLE <Figure 6.1.23>**

You can press to select the subtitle language of current channel.

▶ **SLEEP <Figure 6.1.24>**

You can set the your receiver to turn off after a few minutes. Press to set the sleep timer.

- To cancel the sleep timer, please press until you set time as "0 min". (Disable, 10, 20, 30, 60, 100, 120 Minutes)




<Figure 6.1.23>

<Figure 6.1.24>

▶ **V.FORMAT <Figure 6.1.25>**

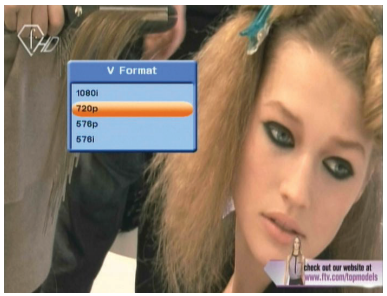
You can press to change the video resoultion Select between, 1080i → 720p → 576p → 576i.

▶ **WIDE <Figure 6.1.26>**

You can press to change the TV aspect ratio.

- **4:3** : Pan-Scan or Letter-Box

-**16:9** : Full-Screen or Pillar-Box




<Figure 6.1.25>

<Figure 6.1.26>

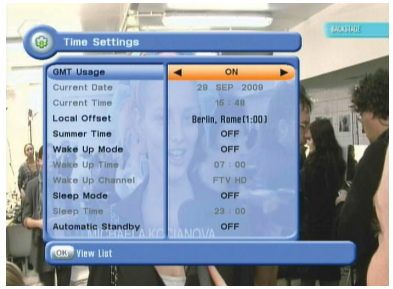


## 6.2 System Setting

### *1) Time Settings*

This submenu allows you to set your local time, wake up time, wake up channel and sleep time. <Figure 6.2.1>

- **GMT Usage :** Set this ON for the local time to be determined by adjusting the time difference with the GMT (Greenwich Meantime) according to your location.
- **Current Date :** If GMT Usage is OFF, you can modify the date by pressing .
- **Current Time :** If GMT Usage is OFF, you can modify the time using the **NUMERIC** buttons.
- **Summer Time :** Select the period during which Summer Time is in force.
- **Local Offset :** If GMT Usage is ON, Local time is GMT time + Local Offset.
- **Wake Up Mode :** Select the wake up frequency. (Off/Once/Daily)
- **Wake Up Time :** Set the wake up time using the **NUMERIC** buttons.
- **Wake Up Channel :** Press to set the wake up channel.
- **Sleep Mode :** Select the Sleep frequency. (Off/Once/Daily)
- **Sleep Time :** Set the sleep time using the **NUMERIC** buttons.
- **Automatic Standby :** Selects auto standby time (OFF/After 1~8Hour) After making your selection press to confirm




<Figure 6.2.1>

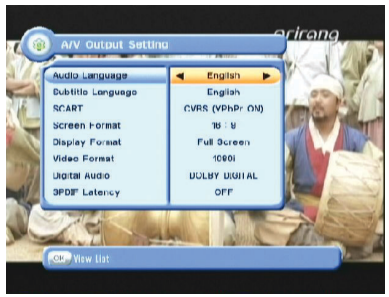
### *2) A/V Output Settings*

This submenu allows you to specify the audio/video output. <Figure 6.2.2>

- **Audio Language :** Set the default audio language when selecting a channel.
- **Subtitle Language :** Set the default subtitle language.
- **SCART :** Select the SCART output.(CVBS/RGB)
- **Screen Format :** Select the screen format. (16:9 / 4:3)
- **Display Format :** Select the TV aspect ratio(Letter Box/Pan Scan, Full Screen/Pillar Box)
- **Video Format :** Select the Scanning type(Interaced, Progressive)
- **Digital Audio** : Select the Audio output type (Dolby/PCM)

  PCM - Select this option only if the stereo system or amplifier cannot decode Dolby

  DOLBY DIGITAL - Select this option only if the stereo system or amplifier can decode both Dolby Digital and Linear PCM signals.
- **SPDIF Latency :** Audio delay is adjustable as 10ms between 0 and 500ms(max.) at optical output.




<Figure 6.2.2>



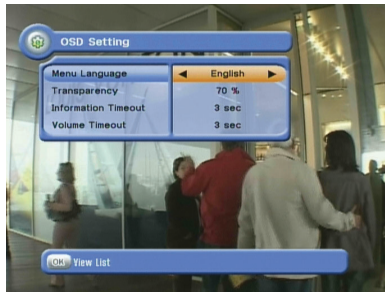




### *3) OSD Settings*

This submenu allows you to set the menu language, OSD transparency and Information and Volume timeouts. <Figure 6.2.3>

- **Menu Language :** Select the desired language for the menu.
- **Transparency :** Set the OSD transparency of the menu. (1% ~ 100%)
- **Information Timeout :** Select the display duration of the information banner. (1, 2, 3, 5 or 10 seconds)
- **Volume Timeout :** Select the display duration of the volume box. (1, 2, 3, 5 or 10 seconds)

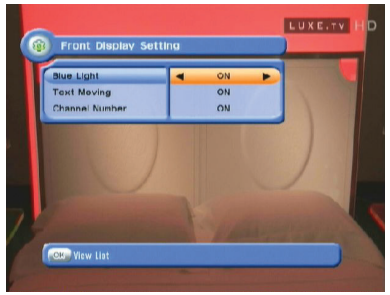



<Figure 6.2.3>

### *4) Front Display Setting*

This submenu allows you to set the blue light, text moving & channel number on the front window.<Figure 6.2.4>

- **Blue Light :** Turn the blue light ON/OFF.
- **Text Moving :** Turn the text moving ON/OFF.
- **Channel Number :** Turn the channel number ON/OFF.




<Figure 6.2.4>

### *5) Security Settings*

This submenu allows you to set password options and to lock or unlock access to menus (Note : PIN code and password are the same). <Figure 6.2.5>

- **Receiver Lock :** Set ON to require entering a PIN code at powering on.
- **Install Lock :** Set ON to require entering a PIN code to access the installation menu.
- **Channel Lock :** Set ON to require entering a PIN code to access the channels menu.
- **Lock Channel Confirm :** Set ON to require entering a PIN code to access a locked channel.
- **Age Limit :** Set to prevent children or unauthorized people from watching programs. Select among (Free/ 8 above/12 above/15 above/18 above). When program information (age limit) is available from broadcaster and this age limit exceeds the selection, a PIN code is required to access the channel/program.
- **Current Password :** To change your password, first enter your current password.
- **New Password :** Enter the new password that you want to set.
- **Verify Password :** Enter the new password again for confirmation.

***∗ Note : The default password is '0000'.***

<Figure 6.2.5>



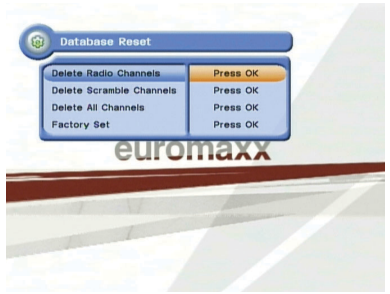




### *6) Database Reset*

This submenu allows you to restore the factory set values (useful when encountering problems after changing settings). <Figure 6.2.6>

- **Delete Radio Channels :** Erase all radio channels in the database.
- **Delete Scramble Channels :** Erase all scramble channels in the database.
- **Delete All Channels :** Erase all channels.
- **Factory Set :** Erase all channels and restore the factory default settings.

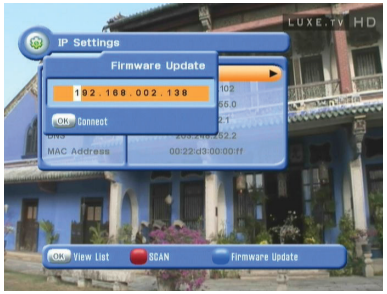



<Figure 6.2.6>

### *7) IP Setting*

If the Network supports DHCP , IP settings can be allocated automatically. If the Network does not support DHCP, the Addresses must enter manually (Static IP).<Figure 6.2.7>

- **DHCP Usage** : On/Off to receive IP settings automatically
- **IP Address** : Here enter the IP address
- **Subnet Mask** : Here enter Subnet Mask Number from your Network
- **Gateway** : Here enter IP address of Gateway (e.g. router)
- **DNS** : Here Enter IP address of main DNS Server
- **Mac Address** : Mac Address display




<Figure 6.2.7>

- Firmware update : Support download from a LAN.

❶ BLUE button, appear input target IP address.

❷ button to connect after input a target IP.

❸ Choose a update software and (OK)button for downloading.

***∗ Note : Have to run PC tool before connect PC.***

<Figure 6.2.8>







### *8) Data Transfer*

This submenu allows you to transfer the software from a receiver to another receiver. You can select and transfer Firmware/ Channel Data/ Games. <Figure 6.2.9>

- **Firmware :** Transfer the firmware of a receiver to another receiver.
- **Channel Data :** Transfer the channel data of a receiver to another receiver.

<Figure 6.2.9>

### *1) Set Favorites*

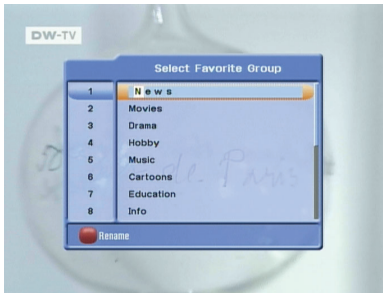
This submenu allows you to set up favorite groups of channels. You can select **TV** or **Radio** channels in an alternative way by pressing the **TV/RADIO** button. The receiver supports 16 favorite groups.

❶ Press OK on 'Set Favorites'. The list of groups will be displayed. <Figure 6.3.1>

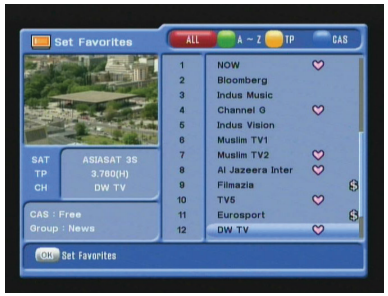
❷ Press CH∧ / CH∨ and OK to choose a group. The following menu will be displayed. <Figure 6.3.2>
If you want to change the name of a favorite group, press the **RED** button.

❸ Press OK to add (or remove if previously added) the selected channel to/from the favorite channel group.

❹ Press the **EXIT** button to return to the previous menu.




<Figure 6.3.1>




<Figure 6.3.2>







### *2) Edit Channels*

This submenu allows you to rename channels and input user PID. You can select **TV** or **Radio** channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

❶ Press OK on 'Edit Channels'. The following menu will be displayed. <Figure 6.3.3>

❷ Press OK on the channel that you want to edit.

❸ Press OK on 'Edit Name' to rename the channel; the keypad will be displayed.

❹ Similarly, you can edit the PID data using the **NUMERIC** keys.

∗ ***Note : The VIDEO PID, AUDIO PID and PCR PID are very important for optimal satellite signal reception. We recommend you get professional advice where available.***

<Figure 6.3.3>

### 3) Move Channels

This submenu allows you to move channels.
You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button.
You can choose a channel list group by pressing the **GROUP** button.

❶ Press OK on 'Move Channels'. The following menu will be displayed.<Figure 6.3.4>

❷ Press OK on the channel that you want to move; a 'move' icon will be displayed.

❸ Use the ▲ / ▼ / ◀ / ▶ / **NUMERIC** buttons to move the selected channel.

❹ Press OK again to place the channel.

❺ Press the **EXIT** button to return to the previous menu.

<Figure 6.3.4>







### 4) Lock Channels

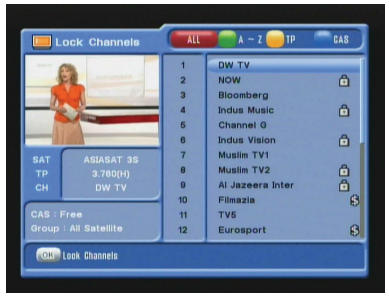
This submenu allows you to lock channels to control access to them. Once a channel is locked, you will be asked to enter a password whenever you try to watch it. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

***∗ If you set 'Lock Channel Confirm' (refer to <6.2>security setting) to OFF, you will not be asked to enter a password even if the channel is locked.***

❶ Press OK on 'Lock Channels'. The following menu will be displayed. <Figure 6.3.5>

❷ Press OK on the channel that you want to lock/unlock; the lock icon will be displayed/removed.

❸ Press the **EXIT** button to return to the previous menu.




<Figure 6.3.5>

### 5) Skip Channels

This submenu allows you to skip channels. Once a channel is set to be skipped, it will be whenever you navigate channels using CH∧ / CH∨ in non-menu mode. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

***∗ Note : You can still access a 'skipped' channel if you enter its number using the NUMERIC buttons in non-menu mode.***

❶ Press OK on 'Skip Channels'. The following menu will be displayed.<Figure 6.3.6>

❷ Press OK on the channel that you want to skip/un-skip; the skip icon will be displayed / removed.

❸ Press the **EXIT** button to return to the previous menu.

<Figure 6.3.6>







### 6) Delete Channels

This submenu allows you to delete channels. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

***∗ Note : Be careful! If you delete a channel, you will not be able to access it again until you rescan.***

❶ Press OK on 'Delete Channels'. The following menu will be displayed. <Figure 6.3.7>

❷ Press OK on the channel that you want to set/unset for deletion; the delete icon will be displayed/removed.

❸ Press the **INFO** button to delete all channels in the current list; you will be asked to enter your password.

❹ Press the **EXIT** button to return to the previous menu and confirm deletion.

<Figure 6.3.7>

## 6.4 Electronic Program Guide

### *1) EPG*

This submenu allows you to access the electronic program guide when available.

❶ Press the **GUIDE** button to display the guide menu. <Figure 6.4.1>

❷ Press ◀ / ▶ to see the previous/next guide.

❸ Press ▲ / ▼ / ◀ / ▶ to select another channel. <Figure 6.4.1>

❹ Press OK to watch the selected channel and access its EPG data.

If you press OK in the right side of the screen (Event display list).

- If the current time EPG is selected, you will return to the previous menu and get signal from the selected channel.
- If a future time (next) EPG is selected, the selected program will be reserved and the event color will change.

❺ You can select TV or Radio channels by pressing the **TV/RADIO** button

❻ You can choose a channel list group by pressing the **GROUP** button.

❼ You can access the timer menu by pressing the **RED** button. <Figure 6.4.2>

### *2) Timer*

This sub menu allows you to set the on/off time of your receiver.

❶ This submenu allows you to set on/off times of your receiver. To display the timer menu, press the **RED** button while in the guide menu. <Figure 6.4.2>

❷ Press OK to select a timer's parameter.

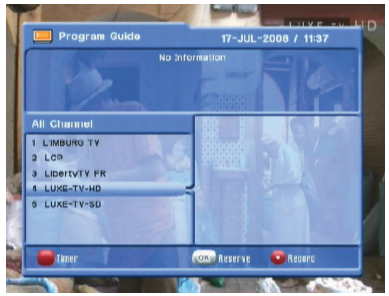
❸ Press ◀ / ▶ to change the parameter.

- **Timer No :** Select the timer that you want to modify. (1- 8)
- **State :** Select the timer frequency. (off/once/daily/weekly)
- **Date :** Press OK to display a Calendar pop-up; Select a date
- **Start Time :** Input the time for your receiver power-on; use the **NUMERIC** buttons
- **End Time :** Input the time for your receiver power-off; use the **NUMERIC** buttons
- **Channel :** Press OK to display a Channel list pop-up; Select a channel

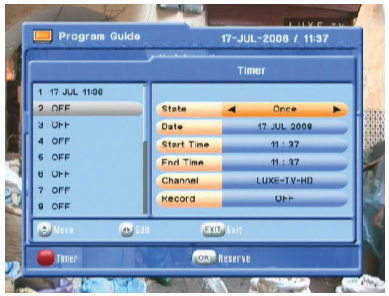






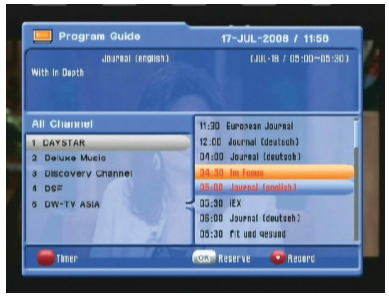



<Figure 6.4.1>

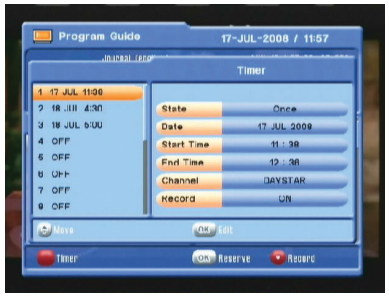



<Figure 6.4.2>

- If you want to record a program in the right side of the screen, you can select a program by using OK. The selected program will be reserved and the evnet color text will change to red. <Figure 6.4.3>.
- You can also see change the timer menu.<Figure 6.4.4>



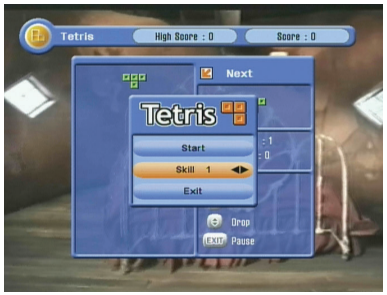

<Figure 6.4.3>




<Figure 6.4.4>

### *1) Tetris*

❶ Press OK on 'Tetris'. The following menu will be displayed. <Figure 6.5.1>
❷ You can choose a skill level using ◀ / ▶.
❸ Press OK to start the game <Figure 6.5.2>, or press the **EXIT** button to return to the previous menu.
❹ Press OK to rotate a block.
❺ Press ◀ / ▶ to move a block.
❻ Press ▼ to drop a block.
❼ You can see the next block in the top-right small window.
❽ Press the **EXIT** button to quit the game.




<Figure 6.5.1>

<Figure 6.5.2>





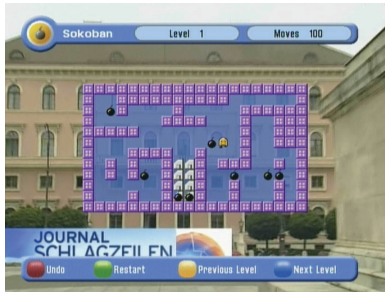


### *2) Sokoban*

How to play Sokoban: you have to push the balls to their correct positions. The balls can only be pushed, never pulled, so you have to be careful not to push them into a corner where you can't get them out from. You can only push one ball at a time.

❶ Press OK on 'Sokoban'. The following menu will be displayed. <Figure 6.5.3>
❷ You can choose a skill level using ◀ / ▶.
❸ Press OK to start the game <Figure 6.5.4>, or press the **EXIT** button to return to the previous menu.
❹ Press ▲ / ▼ / ◀ / ▶ to move.
❺ Press the **RED** button to undo the previous move. You can undo only one step.
❻ Press the **GREEN** button to restart the game.
❼ Press the **YELLOW/BLUE** buttons to jump to the previous/ next level. You can jump only between completed levels.
❽ Press the **EXIT** button to quit the game.

<Figure 6.5.3>




<Figure 6.5.4>

## 6.5 Games

### 3) Snake

❶ Press OK on 'Snake'. The following menu will be displayed. <Figure 6.5.5>

❷ You can choose a skill level using ◀ / ▶.

❸ Press OK to start the game <Figure 6.5.6>, or press the **EXIT** button to return to the previous menu.

❹ Press ▲ / ▼ / ◀ / ▶ to move.

❺ Pass through the **GREEN** icon to increase your score; the length of the snake increases.

❻ Pass through the **RED** icon to decrease the snake's length.

❼ Avoid the **BLACK** icons. If you hit a **BLACK** icon (block), the game ends.

❽ Press the **EXIT** button to quit the game.

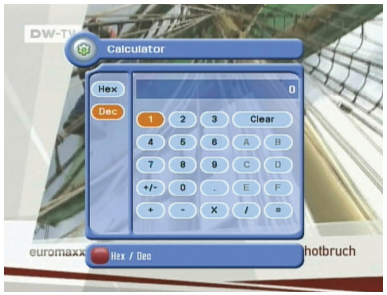
<Figure 6.5.5>

<Figure 6.5.6>

### 4) Calculator

This submenu allows you to use a calculator on the screen. <Figure 6.5.7>

- You can switch between Hex (Hexadecimal) and Dec (Decimal) basis for arithmetic with the **RED** button of the remote control unit.
- Use the Numerical and the ◀ / ▶ / OK buttons on the remote control unit.




<Figure 6.5.7>



## 6.6 Storage

This submenu allows you to play various MP3 files, view JPG files or download a new software by connecting your USB flash drive.

### 1) MP3 menu

❶ Select the MP3 file you want to play back by using ▲ / ▼, OK in the file list. <Figure 6.6.1>

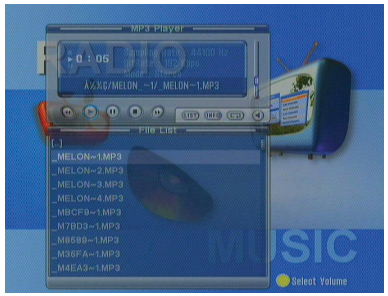
❷ Press the EXIT button to hide the file list. You can then select an option using ◀ / ▶, OK . <Figure 6.6.2>

❸ You can then change the volume by pressing ◀ / ▶.

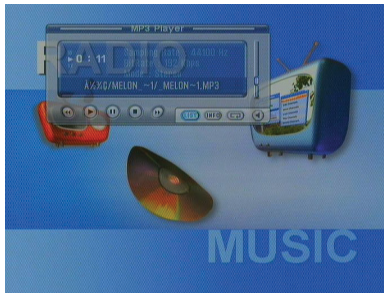
❹ Press OK on LIST to display the MP3 file list.

❺ Press OK on INFO to display information about the selected MP3 file.

- **FILELIST** : Shows/Hides the MP3 file list
- **INFO** : Shows information about the MP3 file you selected.
- **YELLOW** : Choose the Hard disk volume or usb device with USB hub.




<Figure 6.6.1>




<Figure 6.6.2>

### 2) JPG menu

❶ Press ◀ / ▶ to select a picture. <Figure 6.6.3>

❷ Press OK to show the picture you want to display.

- **RED** : Sets the time interval between slides.
- **GREEN** : Selects slide show.
- **YELLOW** : Choose the Hard disk volume or usb device with USB hub.
- **FILELIST** : Shows/Hides the JPEG file list.

<Figure 6.6.3>

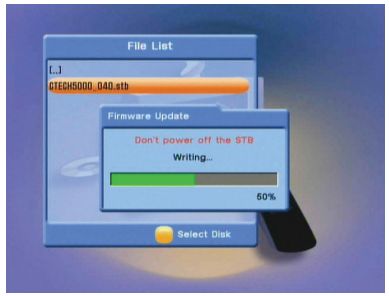
### 3) Data Transfer menu

❶ Select the software you want to download by using ◀ / ▶ in the list <Figure 6.6.4>

❷ Press OK to start software downloading

- **RED :** Upload the current CNDF(compressed dish and channel data file).
- **YELLOW :** Choose the Hard disk volume or usb device with USB hub.

∗ ***Warning : Please do not switch off your receiver before software downloading is completed.***




<Figure 6.6.4>

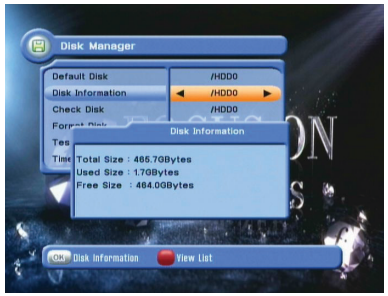




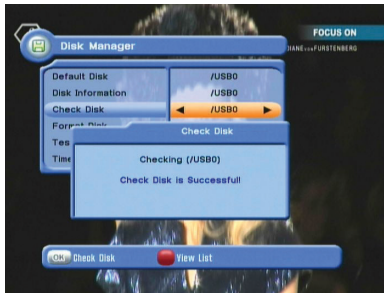


### 4) Disk Manager

- **Default Disk :** Set the pvr disk.
- **Disk Information** : Choose the Hard disk volume or usb device with USB hub. You can view a information of usb devices (used size, total size, free size) <Fig 6.6.5>
- **Chek Disk** : Choose the Hard disk volume or usb device with USB hub. You can check the usb devices. <Fig 6.6.6>

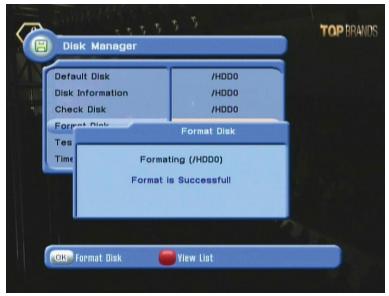



<Figure 6.6.5>




<Figure 6.6.6>

- **Format Disk** : You can format the usb devices. <Fig 6.6.7>




<Figure 6.6.7>

- **Testing USB Speed :** USB speed test.
- **Timeshift Rec Time :** You can change default timeshift recording time.

## 6.6 Storage

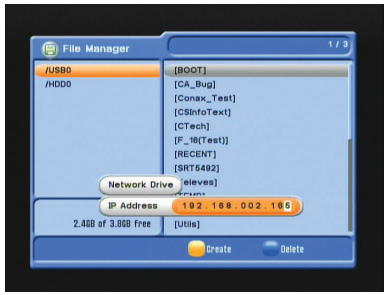
### *5) File manager*

❶ Press YELLOW button for connect PC.

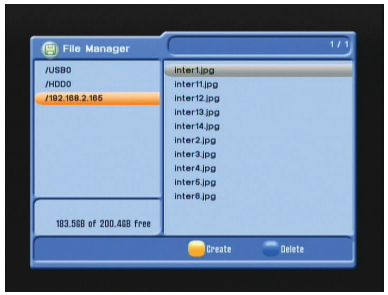
❷ Press OK button after input IP address of PC.

❸ Press OK button after choose target.

***∗Note : Have to run PC tool before connect PC.***




<Figure 6.6.8>




<Figure 6.6.9>

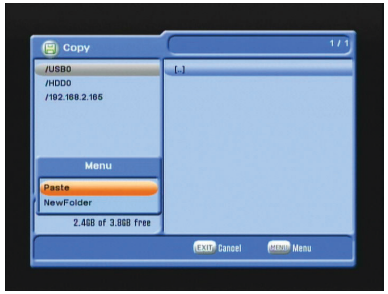
❹ Press Right button and Press RED for chooses files.

❺ Press OK button to choose Copy/Move/NewFolder/Delete/Rename after press MENU button.

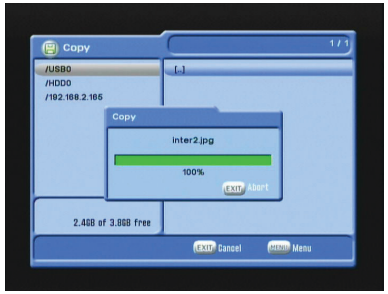
❻ If select copy or move, press button to move target for paste.

❼ Press MENU button to paste taget.

❽ Select a Paste for Copying or Moving files.




<Figure 6.6.10>



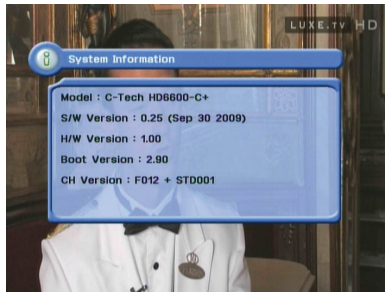

<Figure 6.6.11>



## 6.7 System Information

You can check the current information about your receiver such as receiver model name, S/W (software) version, H/W (hardware) version, manufacturing date, etc.
<Figure 6.7.1>

***∗ Note : This information is useful to download new software and/or repair the receiver.***


LUXE.TV HD
System Information
Model : C-Tech HD6600-C+
S/W Version : 0.25 (Sep 30 2009)
H/W Version : 1.00
Boot Version : 2.90
CH Version : F012 + STD001

<Figure 6.7.1>

## 6.8 Common Interface

### *1) CAM Initializing*

To enjoy scrambled channels, you will need a Common Interface Conditional Access Module (CAM) and a Smart Card from the service provider (program distributor). If you are subscribing to services from more than one service provider, you will need a Smart Card from each one, and may even need different CAMs (depending on the DVB Common Interface standard each uses). Since a Smart Card is connected to a single service provider, a limited range of channels will be available via it.

***∗ Note : Without the CAM and the smart card, you can watch only Free-to-Air programs.***

❶ Insert a CAM into a receiver's slot designed for it, and a Smart Card into the CAM.

❷ The message 'CAM Initializing' will appear on the screen. <Figure 6.8.1>

❸ After the message 'CAM Initializing' has disappeared, you can select the channel that you want to watch.

## 6.8 Common Interface

<Figure 6.8.1>

### *2) The Status of the CAM*

❶ You can access detailed information about the CAM using the / keys in the Main Menu to select 'CI' and pressing . <Figure 6.8.2>

❷ Proceed with further instructions displayed on the screen to check more detailed information depending on the CAM in use.

∗ ***Note : Further detailed information is not mentioned in this manual since the information depends on the CAM in use.***

<Figure 6.8.2>



## 6.9 Conditional Access System

### *1) Card Initializing*

To Enjoy CONAX CAS7 scrambled channels, you will need a Smart Card from the service provider (program distributor). If you are subscribing to services from more than one service provider, you will need a Smart Card from each one. Since a Smart Card is connected to a single service provider, a limited range of channels will be available via it.

∗ ***Note : Without the Smart Card, you can watch only Free-To-Air programs.***

❶ Insert the Smart Card into the receiver's slot designed for it.

❷ The message **'Smart Card Initializing'** will appear on the screen. <Figure 6.9.1>

❸ After the message **'Smart Card Initializing'** has disappeared, you will be able to watch the channels offered by the service provider.

<Figure 6.9.1>

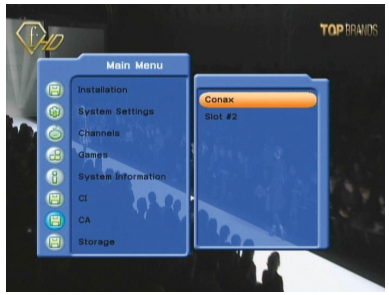
## 6.9 Conditional Access System

### *2) The Status of the Smart Card*

❶ You can access detailed information about the Smart Card using the / keys in the Main Menu to select '**CA**' and pressing . <Figure 6.9.2>

❷ Proceed with further instructions displayed on the screen to check more detailed information depending on the Smart Card in use.

***∗ Note : Further detailed information is not mentioned in this manual since the information depends on the Smart Card in use.***




<Figure 6.9.2>



## 6.10 PVR

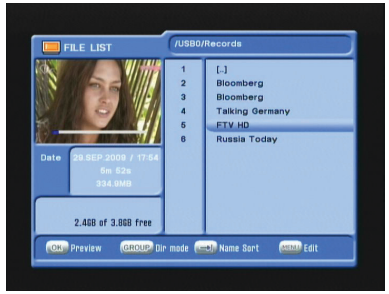
### *1) File List*

▶ **File Playback**

❶ Press to show the file list. Select the file you want to play back by using / , .

❷ Press . In the left side of screen, detailed information about the selected file will be displayed. (Recorded Date/Time, Used size, Total Size) <Figure 6.10.1>

- To see a full screen, press once more. And then the following time-bar will appear. <Figure 6.10.2>




<Figure 6.10.1>

<Figure 6.10.2>

### Edit Menu

You will be asked to enter a password whenever you try to enter it. Press MENU. The pop-up menu for selection will appear<Figure 6.10.3>.

Select the item that you want to edit, and set its parameters as desired

❶ Normal Mode : Press OK on the file that you can see the preview of a selected file.

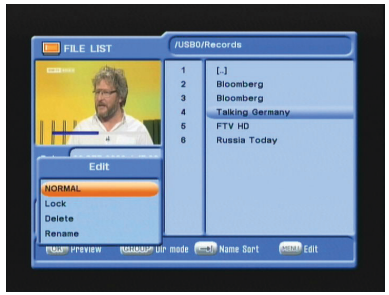
❷ Lock Mode : Press OK on the file that you want to lock/unlock.

❸ Delete Mode : Press OK on the file that you want to delete.

- **GROUP** : Select between, File Mode ↔ Dir Mode
- **ADVANCE** : Shows all sorted files. Select between, Sort by name ↔ Sort by time.

***∗ If you set 'Channel Lock' (refer to <Figure 6.2.4>security setting) to OFF, you will not be asked to enter a password even if the channel is locked.***

❹ Rename Mode : Press the OK button on the file that you want to rename.




<Figure 6.10.3>







### *3) Trick Mode*

You can operate the trick mode while you are playing the recording files. These functions are available in playback mode or time-shift mode powerfully.

#### PLAY

This button will display a time- banner. If you want to show the play list while playing the file by using ▶.

#### PAUSE

This button will pause the playing file until you play again with ▶ or ⏸. <Figure 6.10.4>

#### ADVANCE

- If the time-shift mode is enabled, You can press ⏭ to jump the live program.
- If the playback mode is enabled, You can press ⏭ to stop the current playing file and then jumping the live program.

#### FF(Fast Forward)

- When playing the file, you can press ⏩ to adjusting the playing speed.<Figure 6.10.5>
- The speed will change to x2, x4, x8 and x32.

<Figure 6.10.4>

<Figure 6.10.5>

### ▶ RWD(Rewind)

When playing the file, you can press to adjusting the playing speed. <Figure 6.10.6>

The speed will change to x2, x4, x8 and x32.

### ▶ Slow(1/2x, 1/4x, 1/8x)

When playing the file, you can press to adjusting the playing speed. <Figure 6.10.7>

<Figure 6.10.6>

<Figure 6.10.7>

### ▶ Jump

- You can locate the control position to the desired position by using the / .
- If you press this key continuosly, You can locate the control position to the desired position very quickly.







### ▶ Bookmark

To mark a specific place in a file for later retrieval. <Figure 6.10.8>

- **RED :** Press this button and red small triangle cursor will be placed at that position. If you want to delete the bookmarked position, press a this button once more when red small triangle cursor appear.
- **GREEN :** Press this button and the current position will jump to the next bookmarked position and playback starts from this point.
- **YELLOW :** Press this button and the current position will jump to the pre-bookmarked position and playback starts from this point.

***∗ Note : The maximum number of the bookmark is 20 in a file.***

<Figure 6.10.8>

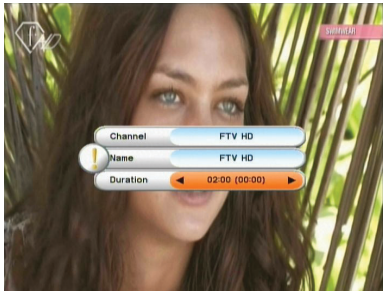
### 4) Instant Recording

❶ You can record a current channel by using . If you then press , a time-banner will be displayed.<Figure 6.10.9>

❷ Press once more. The following picture shows that you can select item when you record a current channel. <Figure 6.10.10>

- **Channel** : It shows a current channel.
- **Name** : It shows a current recording name.
- **Duration** : You can change the duration of recording time by using the / . And current recorded time appear.

<Figure 6.10.9>




<Figure 6.10.10>

***∗ Note : 1. Do not remove the USB device while recording a program.***

### 5) Record Stop

❶ Press the STOP button on the remote to stop the recording then Record Stop will be displayed.

❷ Select the recording file by OK / STOP button.

❸ Press EXIT button then selected recording is stopped. <Figure 6.10.11>

<Figure 6.10.11>







### 6) Timer Recording

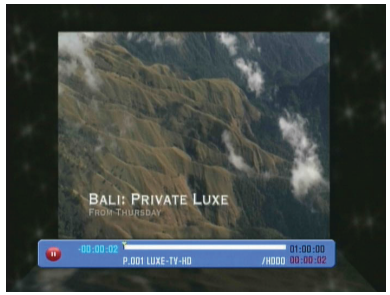
This function is availabe when usb device is connected. You can choose a channel to record the Program Guide menu by using . (Refer to 6.4 Electric Program Guide, 2)Timer)

### 7) Time Shift

❶ If you want to pause and resume live TV channel, press **PAUSE** button. The default time of Time-Shift is 30 min in your STB.<Fig 6.10.12>

❷ If you want to resume live TV channel, press **PLAY** button. <Figure 6.10.13>

❸ The trick-mode operations are provided. If you want to jump to live channel, please press .




<Figure 6.10.12>

<Figure 6.10.13>

# Troubleshooting

There may be various reasons for the abnormal operation of the unit. Therefore, if the unit does not work properly, check it according to the procedures shown in the table below:

| Problem | Possible causes | Remedy |
|---|---|---|
| **The LED light on the front panel does not light.** | The AC power cord is disconnected. | Connect the power cord properly into the power socket. |
| **No Picture or sound.** | Wrong connection of the video/audio output to the TV input terminal. | Connect the two terminals correctly with RCA or RF cable(s), SCART or HDMI cable(s). |
| | Wrong connection of the satellite antenna cable. | Connect the antenna cable correctly. |
| | Wrong direction of the satellite antenna. | Adjust the direction of the antenna. |
| | No signal or weak signal. | Check the cable connections, the LNB and other equipment connected between the LNB and the receiver, or adjust the antenna. |
| | Wrong setting of channel information in the MENU screen. | Type the setting values correctly. |
| **Black-and-white screen or V-Hold.** | Your TV mode (PAL/NTSC) is different from the satellite broadcasting mode. | Use a TV of the same mode. |
| | | Connect a NTSC/PAL converter between the receiver and the TV. |
| **The remote controller is not working.** | Batteries are exhausted. | Change the batteries. |
| | Fluorescent light is interfering with the remote controller. | Switch off the light. |
| | Remote controller is incorrectly aimed. | Aim the remote control at the receiver. |



# Specifications



| | | |
|---|---|---|
| **System capabilities** | Fully DVB compliant | |
| **satellite** | Connector | IEC 169-24, female |
| **LNB/Tuner input** | Frequency range | 950MHz ~ 2150MHz |
| | Signal level | -65dBm ~ -25dBm |
| | LNB supply | DC 13/18V, max 400mA |
| | LNB switch control | 22KHz |
| | DiSEqC | Ver 1.0/1.1/1.2/USALS Compatible |
| **Demodulator** | Front end | DVB-S/S2 QPSK, 8PSK |
| | Symbol rate | DVB-S : 2~45Msps |
| | | DVB-S2 : 10~30Msps(QPSK) 10~30Msps(8PSK) |
| | SCPC and MCPC Capable | |
| | Spectral inversion | Auto conversion |
| **TERRESTRIAL** | Input connector | IEC 169-2, Female |
| **System capabilities** | Loop-through out | IEC 169-2, Male |
| **Tuner** | Frequency range | 170 ~ 230 MHz, 470 ~ 862MHz |
| **& Channel Decoder** | Input impedance | 75 Ohms Nominal |
| | Signal level | 7,8MHz(-78dBm~-25dBm) switchable by software |
| | IF Bandwidth | 7,8MHz(-3dB) switchable by software |
| | Waveform | OFDM |
| | Carrier Mode | 2k and 8k hierarchical/non-hierarchical |
| | Code Rate | 1/2, 2/3, 3/4, 5/6, 7/8 |
| | Guard Interval | 1/4, 1/8, 1/16, 1/32 |
| **System resource** | Processor | 32bit processor (266MHz) |
| | DDR SDRAM | 32Mbyte X 2, 64Mbyte X 2 |
| | FLASH | 8Mbyte |
| | EEPROM | 256Kbit |
| **Video decoder** | MPEG 2 | MPEG-2, MPEG-4, H.264 |
| | Data Rate | up to 15M bits/s |
| | Resolution | 1920 X 1080i, 1280 X 720P, 720 X 576P/i |
| | Video format | PAL |
| | Aspec Ratio | 4:3,16:9 |
| **Teletext** | DVB compliant | |
| **MPEG Audio** | MPEG 1 layer 1 &2 | |
| | Type | Mono, Stereo, Joint Stereo |
| | Sampling rates | 32, 44.1 and 48 KHz |
| **Serial data interface** | Connector | 9pin D-sub male, Max 115K bps |

| | | |
|---|---|---|
| **Remote control** | Code | NEC-IR |
| | Operating condition | up to 7 Meter |
| **USB** | USB Supply(Front/Rear) | DC 5V Max 500mA |
| **Power supply** | Power consumption | max 60W |
| | Supply voltage | 100V ~ 250V |
| | Supply frequency | 50Hz ~ 60Hz |
| | Standby power consumption | max 1W |
| **Rear Panel connectors** | TV SCART | CVBS, RGB Video output |
| | | Loop-through RGB output |
| | | Audio Out |
| | VCR SCART | Video Out(CVBS) |
| | | Video In(CVBS, RGB) |
| | | Audio Out(L, R) |
| | Video | 1 X RCA cinch |
| | Audio L/R | 2 X RCA cinch |
| | Component(Y/Pb/Pr) | 3 X RCA cinch |
| | Serial data | 9pin D-sub |
| | Digital tuner input | IEC 169 - 24 |
| | Loop-through Digital tuner | IEC 169 - 24 |
| | Terrestrial ant input | IEC 169 - 2 |
| | Terrestrial ant output | IEC 169 - 2 |
| | S/PDIF | Fiber Optic |
| | HDMI | 1 X HDMI |
| | USB | USB A-type |
| | LAN | RJ-45 |

| | | |
|---|---|---|
| **Physical Specification** | Size (W X H X D) | 390 X 73 X 283 (mm) |
| | Weight (Net) | 3 Kg |

**Disposal of Old Electrical & Electronic Equipment(Applicable in the European Union and other European Countries with separate collection systems)**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipnent. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropirate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.